



# AVINOR

## OSLO AIRPORT

### Gardermoen

SNOW PLAN 2023 - 2024



# 1. Version

This version reflects the 2023/2024 season. If there is an update, the entire document will be replaced with new date and version number. The aim is to disseminate information in a simple and standardized way. The regulation of responsibilities with regards to external companies and organisations working at the airport is elaborated in Airport Regulations (AR) and licence agreements, not via this document.

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### 3. Aim of the document/introduction

Adverse weather conditions, in the form of snow, ice, fog and frost have an impact on airport operations during the winter months. The consequences could be disruptions to flight timetables, deteriorated conditions for ground transport services and a greater workload for all companies and organisations at the airport.

There is a great need for coordination and cooperation under such conditions.

Snow clearance of runways, taxiways, aprons, and aircraft parking stands is a very demanding task. Airlines want to operate their flights with as minor delay as possible and to avoid cancellations and the airport wants to provide optimal capacity with safety as the primary driver.

Safe operation is only possible when conditions on the aircraft movement area are such that they can satisfy the airport and the authorities' requirements.

In AIP Norway AD 1.2, item 2 SNOWPLAN, you will find the general rules for winter operations at all the Avinor airports.

See the following link: [Avinor - eAIP Norway AD 1.2](#)

This document contains a brief description of how we work and set priorities to minimise disruptions at OSL and is prepared for flight operations during winter conditions.

### 4. General

OSL is well prepared for snow and our objective at Oslo Airport, Gardermoen, (OSL) for snow clearing and de-icing, is to have as minimal impact on operations as possible.

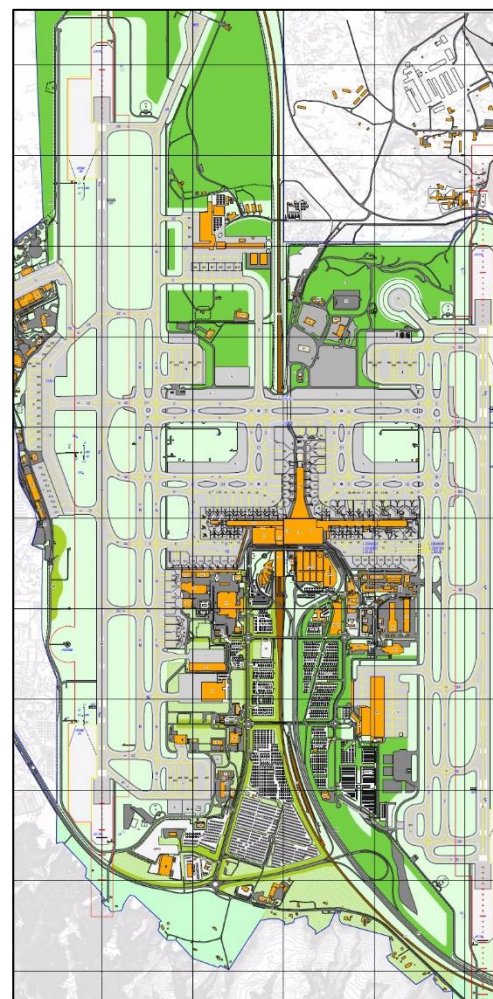
Air traffic may be affected by heavy snowfall, but our ambition is to never close because of snow. –A main ambition is to always have one runway operational and never close both runways at the same time.

When snow clearing a runway, the tactical arrival delay is normally around 10-20 minutes. The main driver for arrival delay is the number of aircraft, not the amount of snow, if both parallel runways can be kept open.

OSL's runway system consists of two parallel runways and associated taxiways. The runways are linked to aprons (ramps), aircraft parking stands and service roads for vehicular traffic. To make use of the airport's capacity, all kinds of surfaces must be accessible and clear of snow to be operational. Friction control, of the areas on airside, is managed using chemicals and sand.

Reporting of runway surface conditions is according to the Global Reporting Format (GRF) which is a globally harmonized methodology for assessing and reporting runway surface conditions developed by ICAO.

The airport's preparations for winter operations starts in September with the training of its own and hired personnel at Airfield Maintenance. The preparations will take place until 15 October, when the airport shall be fully prepared for the coming winter season.



Until 15 April, the airport is fully staffed with winter personnel. Experience from previous winter seasons is that heavy snowfall can also be experienced in April. To be prepared for such weather conditions, routines have been established to have standby personnel available until first of May.

## 5. Organization

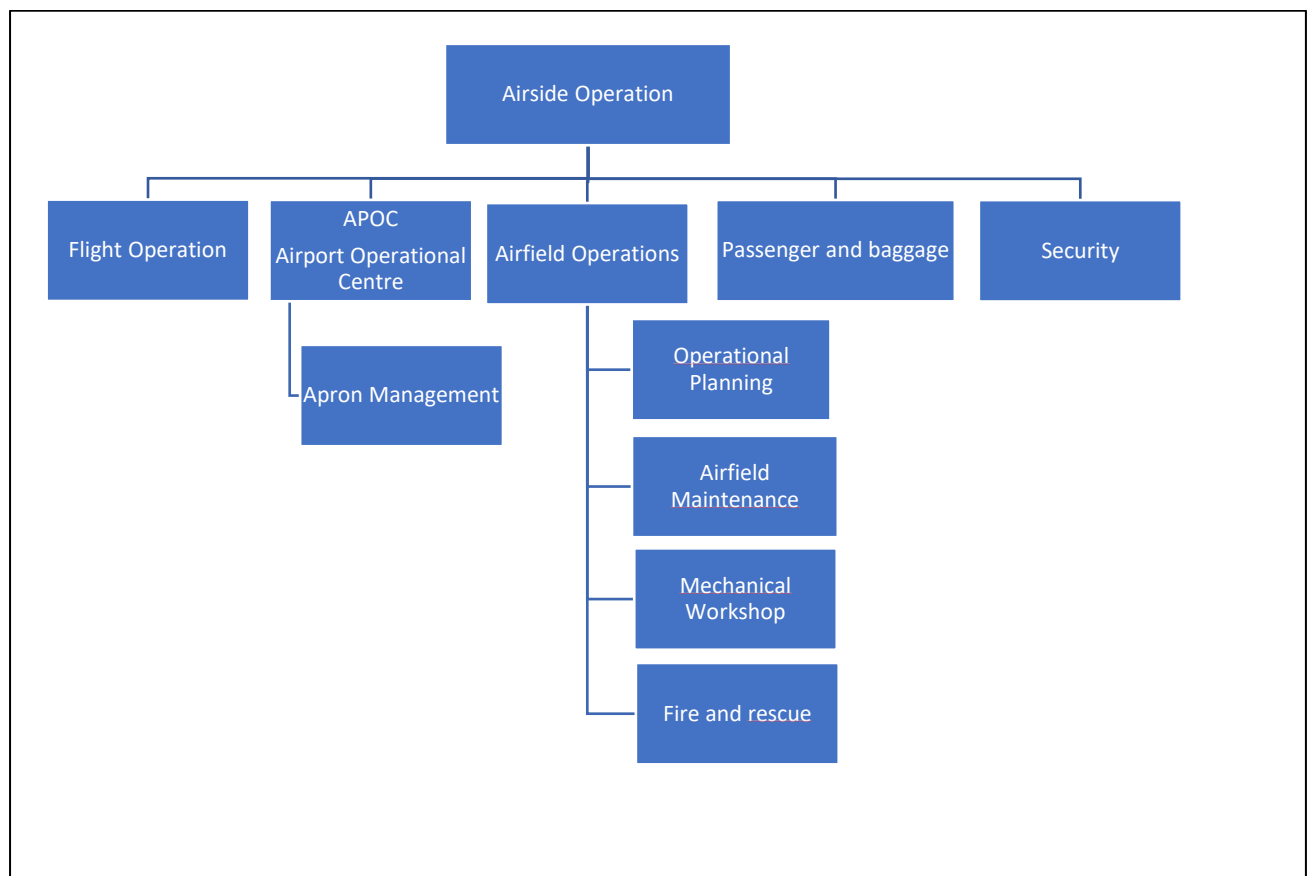
The airport's organization on the airside is indicated in the organization map below.

**Flight Operations** is part of the planning and lay the basis for regulations and follow-up the experiences from day to day.

**Passenger and baggage** and **Security** provides input related to terminal operations and passenger capacity.

**APOC** - APOC - Airport Operations Centre, during winter operations, coordinate and evaluate all the airports resources and expected weather in relation to the planned traffic demand on a Day -1 basis. Based on the expected situation APOC will coordinate, with all the relevant parties, the need for necessary infrastructure and personnel to meet the expected capacity for the next day.

**Airfield Operations** is the part of the organization that conducts the operations in relation to snow removal and preparation of taxiways, runways, and other parts of airside.



**Note:** One of the airport's departments, which does not appear in the organizational chart, is the Department of Water and Environment. This department monitors and manages the environmental requirements imposed by the authorities. This is relevant to winter operations when chemicals are used on runways and aircraft de-icing. If limit values are exceeded, this can affect the available infrastructure and thus the airport's capacity.

## 6. Meeting structure

A brief overview of the airports meeting structure throughout a winter season is described below.

- If the need for coordination and operational experience arises, additional temporary meetings can be held to ensure that the airport's capacity is as optimal as possible. Before each winter season, a meeting is held to review the planning and the evaluation of the last winter season, as well as to update all airport personnel on changes and revisions on the procedures and equipment.
- After each winter season, all relevant departments meet to evaluate the last winter season and to collect all experiences and use this to prepare for the next season. Every 14 days, if found necessary, ATC and Airfield maintenance have a meeting to discuss operational issues experienced and which may be relevant for the day-to-day operations.
- Once a week a "TWR-meeting" is held with operational parties. This meeting focuses on all maintenance planned for the actual day and coming week. If necessary, issues related to winter operations and capacity may be discussed and evaluated.
- Every evening APOC arranges a conference call with ATC TWR, ATC APP, Airfield Maintenance, De-ice Service Providers. APOC calculates the need for resources on the de-ice pads for the coming day, so that those affected confirm that they will have necessary resources available. Should it, contrary to presumption, be the case that the necessary resources cannot be provided, this could lead to potential traffic regulation.

## 7. Snow committee/Traffic Tactical Forum

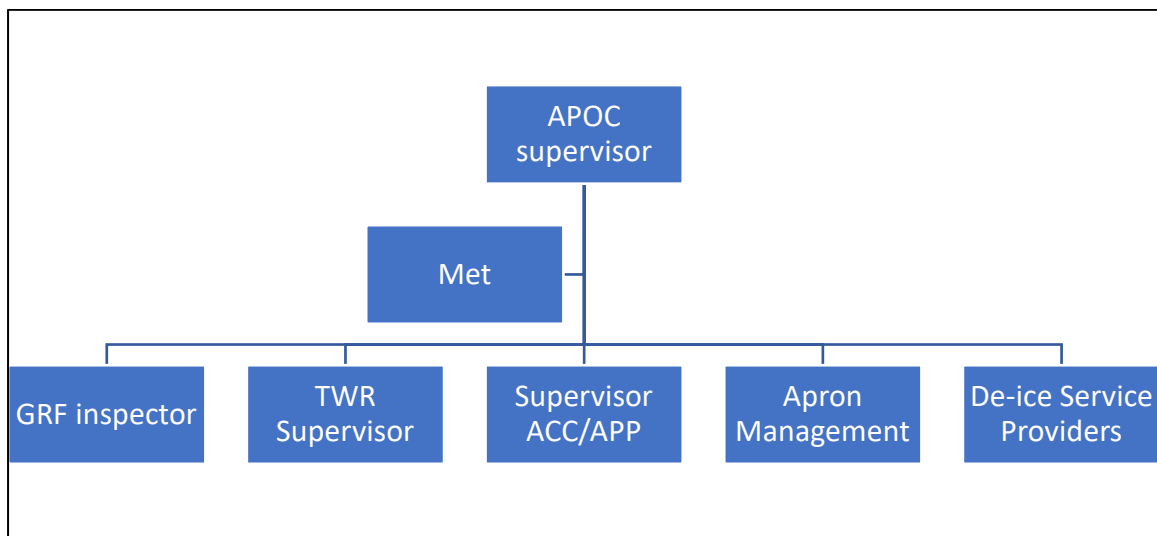
At OSL, the Airfield Maintenance, Apron Management, ATC and APOC monitors actual weather and weather forecasts. If weather forecasts, assessed against resources, are considered as challenging, the APOC will call in the Snow Committee/Traffic Tactical Forum.

The Snow Committee/Traffic Tactical Forum will assess the situation and according to the following conditions:

- Weather forecasts (low visibility, wind direction, amount of snow).
- Is a change of runway direction expected?
- Will the operational status of the navigation aid be affected?
- The onsite GRF INSPECTOR are the one that will evaluate actual and the weathers potential influence on the runways and taxiways.

If it is considered that the conditions may cause challenges and restriction on capacity, the Airport Operations Manager (AOM) will be informed. APOC will activate local procedures to inform all operators, handling agents and all other relevant parties operating on and at the airport about the expected consequences.

One of the actions that may be implemented is to reduce specific predefined areas for snow clearing/preparation. Reducing such these areas will be evaluated according to the impact on capacity and the airports' ability to keep the airport open.



## 8. Demanding winter conditions

The definition at airports of "demanding winter conditions" is when the airport's capacity for snow removal is not sufficient to remove contamination (snow or ice) and affects acceptable operating criteria are exceeded.

Such conditions could be amounts of snow over 30 cm in 24 hours a day, snow intensity over 4 cm dry snow/ 2.5 cm wet snow per hour, freezing rain, breakage on critical machinery and equipment or absence of staff.

During normal winter operation, priorities for snow clearing are set as indicated in the priority chart shown in chapter 13. When especially demanding winter conditions is expected, experienced, or forecasted and is assumed to have a serious impact on airport capacity, measures must be taken to avoid closing the airport.

The measures are one of the detailed solutions on challenges described in Avinor Emergency Management and Crisis Management procedures.

It is an aim to establish a common understanding when such a situation occurs, the conclusion may be that predefining priorities can be omitted from the standard snow clearing plans and describe how the actors are to cooperate to achieve optimal operation capacity and surface conditions.

## 9. Low Visibility

Snow clearing operations are performed in parallel with aircraft movement down to RVR 400m. When the visibility is below RVR 400m the choice is to prioritize, either air traffic or snow clearing. The intermediate holding positions, SOMBI and NOLAC on TWY Papa/Victor, may be used as a dividing line with stop bars activated, so that snow clearing may be permitted, e.g., east of SOMBI/NOLAC, and air traffic is allowed west of SOMBI/NOLAC. When switching snow clearing between the western and eastern areas, the snow clearing group must be clear of the manoeuvring area, e.g., waiting on a de-ice pad, while moving a queue of aircraft over to the newly ploughed areas. When all the aircraft is clear of the area to be ploughed, the snow clearing group is allowed to start on the new area. The intention with such a strict procedure, in visibility below RVR 400m, is to increase safety and not allow aircraft and vehicles to operate simultaneously on parts of the manoeuvring area.



## 10. De-ice

Gardermoen Airport has two main de-icing pads: - Alpha South for RWY 01L operations and Bravo North for RWY 19L operations. On days when it is considered that de-icing capacity cannot meet the runway capacity, de-icing pad Alpha North may also be used if needed.

De-icing capacity and runway capacity are continuously assessed in relation to the expected weather and the airport will seek measures so that the impact will be as small as possible.

On days without precipitation, "one-step" de-icing will be performed with an expected delay of 10 minutes. When there is heavy precipitation and "two-step" de-icing is used, the delay can be up to 30 minutes.

The general procedures used during de-ice is described in AIP Norway AD 2.20 ENGM, item 11. For code F aircraft additional procedures is described in AD 2.23, item 4.3.

A minor change in the de-ice process will be valid from 27 December 2023.

The allocation of de-ice bays is coordinated by the airports Apron Management Department.

A change in the transfer routine when pilots taxi for de-ice will be implemented:

- A pilot on the way to assigned de-ice pad will be transferred from ATC to a new unit which will allocate the de-ice bay the pilot shall taxi onto. Callsign on this unit is APRON.
- When a pilot is on correct de-ice bay and pilot on code C aircraft reports "Park brake set, ready for de-ice" or a pilot on code D, E, F reports marshaller in sight, the pilot will be transferred from APRON, to the relevant de-ice service provider frequency, callsign ICEMAN (freq).

During winter operations that require extensive de-ice activity, aircraft that do not require de-ice might be cleared to holding point A2 (01 operations) or B8 (19 operations). ATC must be informed if departure from other RWY intersections is desired.

## 11. Snow Clearing Airside

### 11.1. How snow clearing works

Snow clearing is conducted in groups, called snow clearing group (SCG), ref. 11.4.

Special predefined routes are planned for the separate groups, and it takes about 1 hour from the start of snow clearing a runway until both runways, including associated defined taxiways, are cleared and are ready for a new start. The airport defines maximum allowed time for clearing a runway to 15 minutes.

The SCG are led by a Global Report Format inspector (GRF INSPECTOR) who also is responsible for runway condition assessment and reporting. The GRF INSPECTOR has direct contact with the air traffic control tower (ATC TWR) and is operating from one of three available vehicles

equipped with all necessary tools: for communication, assessment of friction, transmitting breaking action reports and other tools.



Each SCG consists of machines, (Sweepers), able to plough, sweep, and blow, which move side by side. The Sweepers are followed by a snow blower and wheel loaders. As needed, spreaders laying de-icing agent or sand on the runways/taxiways come last.





When snow clearing is completed, the runway condition is judged by the GRF INSPECTOR, and a Runway Condition Code (RWYCC) is assessed and set. The RWYCC is sent automatically to the ATIS and is reported to ATC TWR, which in turn, if needed, will provide the information to pilots via radio.

The condition on the runway and the weather are often the basis that determine how often a runway must be ploughed and treated with either de-icing agents or sand.

### 11.2. Vehicles and other equipment

To conduct quick, safe, effective, and environmentally friendly snow clearing, machinery and equipment with the latest technology and performance standards are required. OSL have more than 80 vehicles of different types to cater for all the maintenance necessary throughout the year.



For the winter season 2023/24 the airport has Sweepers which each have a clearing width of 7,5m and 5,5m.

The new Sweepers are prepared for autonomous mode and will initially and during testing have a safety driver onboard. More detail on the autonomous project is described in chapter 10.

Below is a list of our most used snow clearing machines and the quantity.

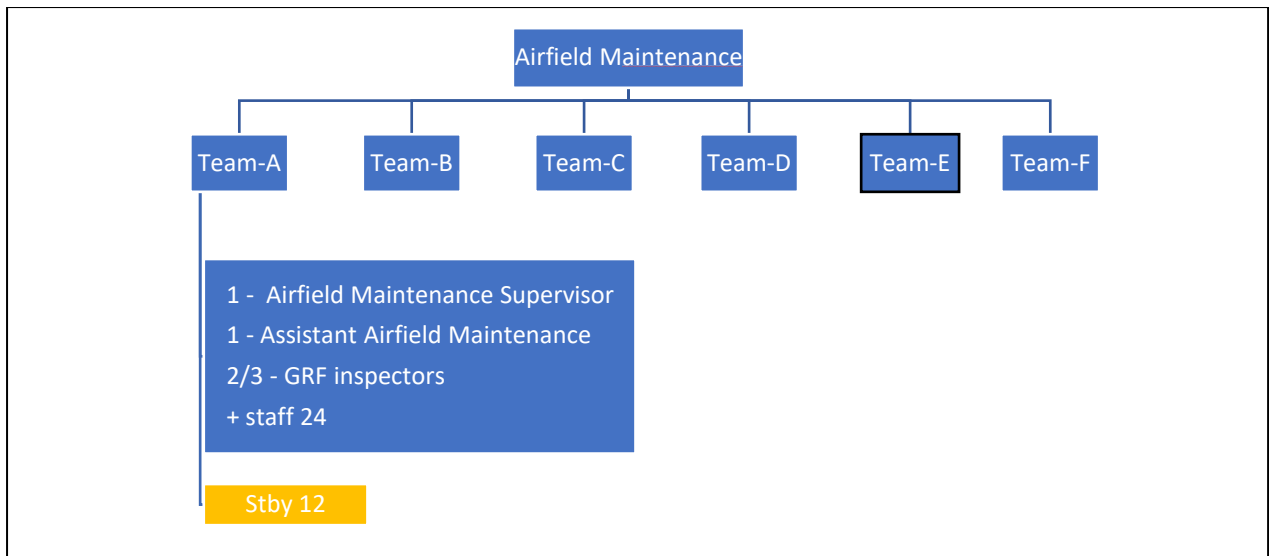
- Wheel loader: 15
- Sweeper RS600: 12 (clearing width of 7,5m)
- Sweeper RS400: (clearing width of 5,5m)
- Sander: 7
- Snowblower: 6
- Unit snowblower: 4
- Chemical spreader: 4
- Tractor: 2
- Snowcat 1
- Road grader 1
- Friction vehicles 3
- An external contractor is used for snow clearing on aircraft stands.



### 11.3. Organization and staff at Airfield Maintenance

Airfield Maintenance is a subdivision of the airports Operations division, with responsibility of all maintenance of taxiways and runways, both summer and winter. Airside Maintenance is divided into 4 sub-departments and winter operations is the responsibility of the sub-department Airside Maintenance.

The Airfield Maintenance, have 6 shift teams and during winter, each with 24 people always on site H24/7 and in addition 12 people on standby.



The shift teams consist of an Airfield Maintenance Supervisor, Assistant Airfield Maintenance, and a Team Leader Snow Clearing (GRF INSPECTOR).

Winter operations are conducted by 5 dedicated snow clearing groups (SCG). The SCG clear each dedicated predefined area according to prioritization and at necessary intervals.

The team staff (24 persons) is available to man the SCG 1, 2 and 4.

In addition, if needed stand by personnel is called in to staff SCG 3 and 5.

The standby personnel are available on 2 hours' notice.

#### 11.4. Snow clearing groups

The number of SCG's needed is based on the actual and forecasted weather.

The Airfield Maintenance Supervisor (AMS), will be based on weather forecast and expected traffic, coordinate the need with the APOC and ATC in advance and call in the additional personnel if needed.

SCG 1 clearing RUNWAY and TAXIWAYS, available H24/7

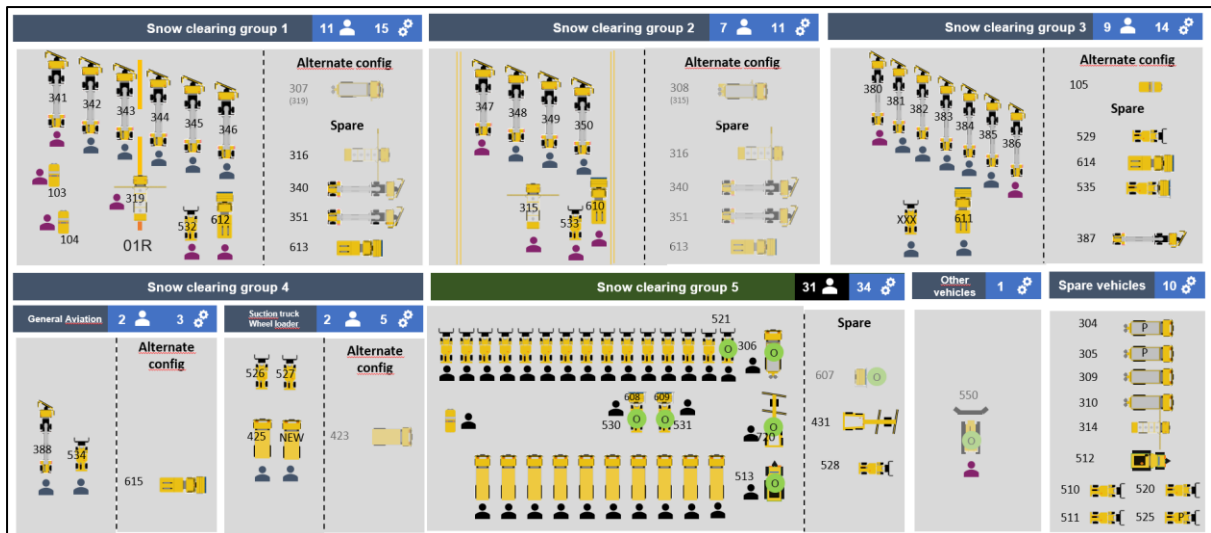
SCG 2 clearing RUNWAY and TAXIWAYS, available H24/7

SCG 3 clearing MAIN TERMINAL AREA TAXIWAYS, on standby, called in if needed.

SCG 4 Clearing the GA area, available H24/7

SCG 5 Clearing AIRCRAFT STANDS at main terminals, on standby, called in if needed.

Picture 1 indicates the different snow clearing groups and associated equipment planned for the 2023/2024 winter season.



Picture 1

SCG 1, 2, and 3 consists of PSB machines that move side by side. The PSB machines are followed by a snow blower, wheel loaders and additional needed vehicles.



## 12. Practical winter maintenance

### 12.1. Snow clearing phases

The “winter period” is, at OSL, defined to start on 1 October and end on 15 April. In practice, this starts when the first winter weather (ice/snowfall/sleet) occurs and ends when meteorological conditions indicates that there is little chance for further snow and/or ice condition.

Snow clearing of the runway and taxiway system is normally conducted in 3 separate phases:

- Phase 1:** Runway and taxiways with necessary exits and emergency road for actual runway in use.  
 Most used phase during day when traffic is high unless phase 2 is deemed necessary.  
 RWY clearing time maximum allowed is 15 minutes.

- Phase 2:** Runway including edge lights, shoulders on runways and taxiways, all runway exits, clearing of snow edges/banks.  
 This phase is used during heavy snowfall and when needed, in low traffic and during night to prepare the airport for the coming days.
- Phase 3:** Runway safety areas and edge profiles - clearing of navigation instruments and critical areas, direction signs and lighting systems that are necessary. Post snow clearing, such as removing ice and snow to prevent icing around signs, lamps, and the like, as well as control and preparing of snow dumps.  
 Phase 3 may be conducted at night and during periods of low traffic, when phase 1/2 is not needed, so the airport is prepared for future precipitation.

Note: Depending on weather conditions, it may be necessary to prioritize across the phases.

### 12.2. Runway exits available in phase 1/2

The available runway entry/exits are dependent on the time allowed to sweep a runway, amount of precipitation and traffic demand. The minimum time allowed to sweep one runway is 15 minutes and does not allow all the entry/exits to be cleared of contamination. The table indicate the entries/exits that will be cleared in phase 1 and 2.

Runway direction	Phase 1 entry/exit cleared	Phase 2
01L	A1, A2, A5, A6, A7, A9	All entry/exit cleared
01R	B1, B5, B6, B7, B9	All entry/exit cleared
19L	B9, B8, B5, B4, B3, B1	All entry/exit cleared
19R	A9, A7, A5, A4, A1	All entry/exit cleared

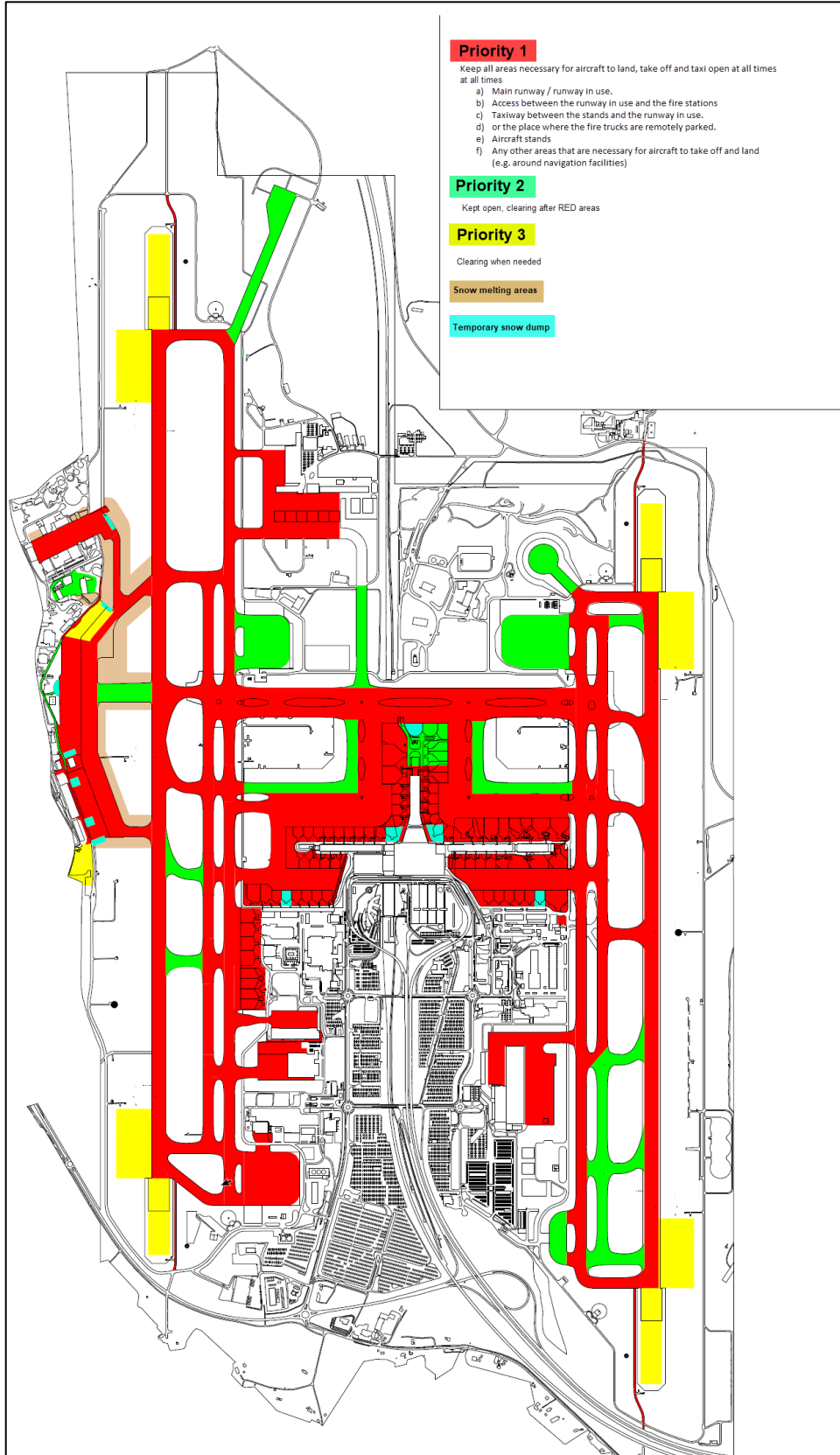
If an entry/exit is not open, information will be provided either from ATC on radio or via ATIS.

## 13. Snow clearing priorities

Based on runway in use, the snow clearing priorities will change according to which runway direction used. The pictures 2 and 3 indicates the different priorities based on runway direction.

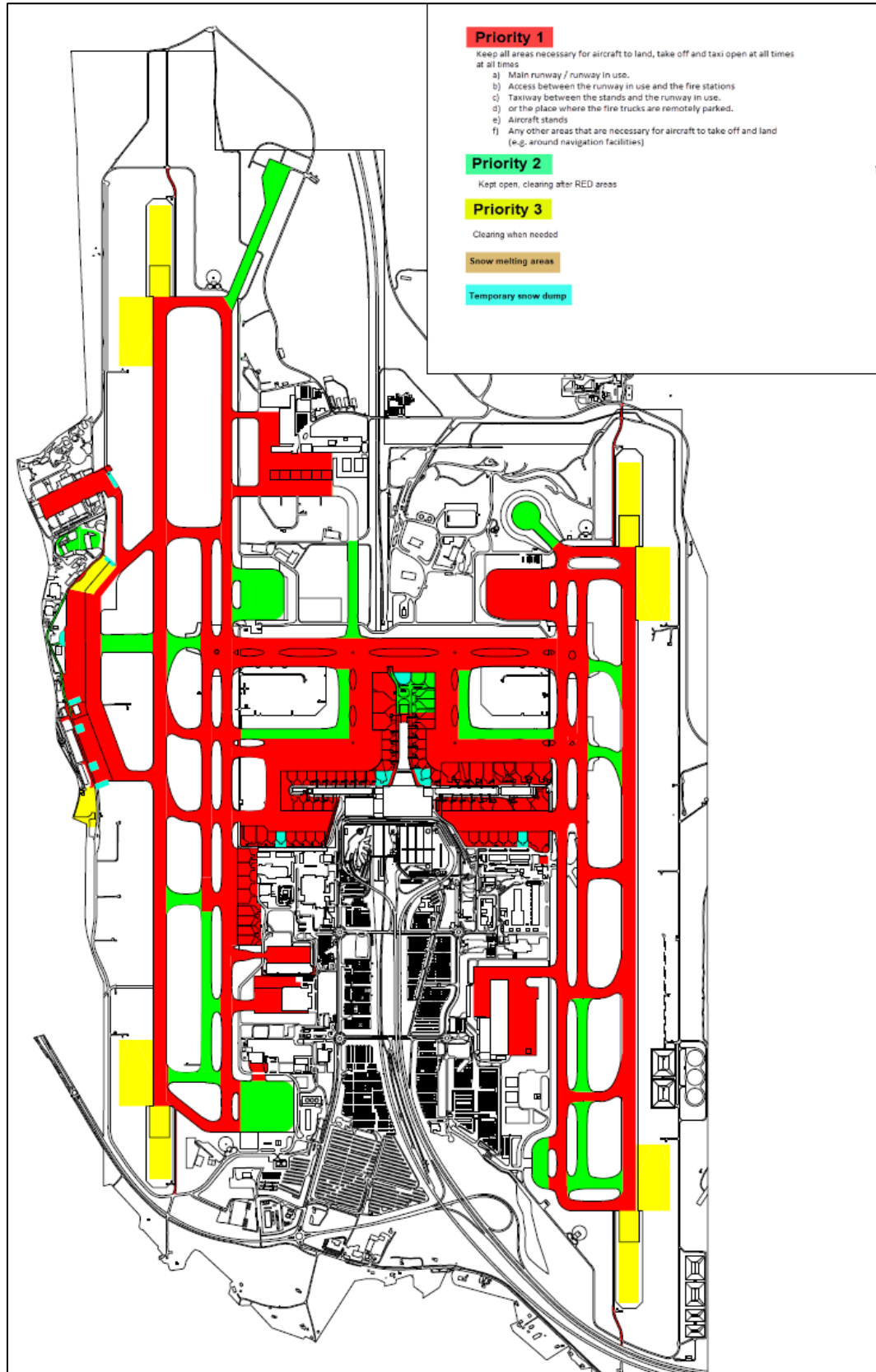
**Priorities  
RWY 01  
operations**

Picture 2



**Priorities  
RWY 19  
operations**

Picture 3



## 14. Example snow clearing a RWY in phase 1

Below is a simplified example on a routine for phase 1, snow clearing an RWY:

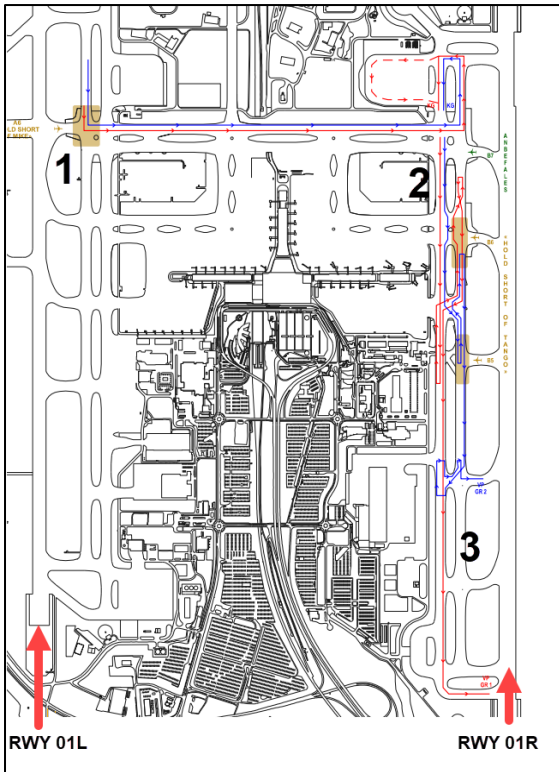
RWY in use: RWY 01R ARR and 01L DEP, AS de-ice pad.

- The GRF INSPECTOR inform the TWR Supervisor that RWY 01R needs snow clearing at time 10:15 and at also inform about the expected time for snow clearing of RWY 01L.
- The TWR Supervisor advise the Approach (APP) that RWY 01R will be closed from 10:15 to 10:30. If departure and de-ice demand permits the TWR may allow limited number of landings on RWY 01L, to reduce arrival holding delay.
- Group 1 and 2 is given clearance by TWR, to holding point RWY 01L.
- The communication is only done between the GRF INSPECTOR and TWR via UHF to keep the radio traffic as low as possible.
- TWR and APP coordinate the last landing on RWY 01L according to the closing time given from the GRF INSPECTOR.
- After the TWR/APP coordinated last landing, and the aircraft has landed and turned off the RWY, TWR “hand over” responsibility of the RWY to the GRF INSPECTOR.
- The APP plan to have the first landing on RWY 01R on 4-5nm final at time approx. 10:29. If the GRF INSPECTOR finds that they will use less than 15 minutes, the TWR/APP is informed, and APP will then be able to reduce delay and plan an earlier landing.
- When SCG 1 and 2 is turning off the RWY, the GRF INSPECTOR enter the RWYCC into the Touchscreen-Based Runway Condition Reporting System/TRACR for publishing a SNOWTAM and automatically sent to the ATIS.
- The pilot will get RWYCC report on radio on approx. 3nm final.
- When RWY 01R is cleared and the SCG is clear of the RWY, the GRF INSPECTOR “hand” the RWY back to TWR.

Pictures 4 and 5 show an example on the standardized driving pattern Team 1 and 2 used in Phase 1.



Picture 4



**1:** Group 1 (red) and 2 (blue) is finished clearing RWY 01L and is waiting for clearance to proceed to RWY 01R

**2:** When clearance is received from TWR both Teams snow clears TWY V, part of TWY Tango and TWY Sierra, the groups split, and Group 1 snow clears TWY Sierra, and Group 2 snow clears TWY Tango.

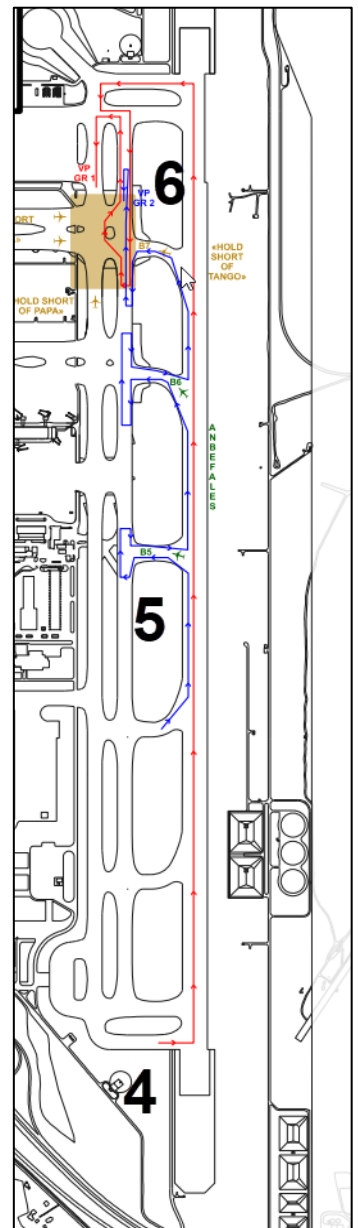
**3:** When finished with the TWYs, both groups wait for clearance to enter RWY 01R.

**4:** When clearance to enter RWY 01R is received, after the last landing which was coordinated btw TWR and APP, both groups enter the RWY.

**5:** Group 1 snow clears the RWY. Group 2 snow clears the relevant RWY exits.

**6:** When both groups are finished, the RWY is handed back to TWR.

Picture 5



## 15. Criteria for assessing the conditions on the movement area

AIP Norway “AD 1.2 Rescue and firefighting services and snow plan” describes that the general policy for the aerodrome operator through the aerodrome preventive and corrective maintenance programme shall assure that the surface characteristics does not fall below minimum requirements for safe operations. However, if the situation should arise, the runway should be closed, and information of relevant details on the duration and the cause issued via NOTAM.

### 15.1. Runways

The general policy is that a runway where a Runway Condition Report (RWYCC) where the RWYCC is above 0 is considered safe for the airport to operate on. When RWYCC is 0, no associated flight performance documentation is available, and the airport is considered closed.

When one pilot has reported a LESS THAN POOR runway braking action the aerodrome operator must re-assess the runway surface condition and consider the suspension of operations on that runway.

- I. Maximum permitted contaminated depths on runway in use:

Location	Slush	Wet snow	Dry snow	Note
Runway	13 mm	25 mm	60 mm	All aircraft types

- II. The airport will always clear the runways in full width, 45 m, but should a situation arise when this is not possible, the following criteria will be considered used:

- Snowbanks allowed on the runway with minimum distance to centre line: 20M.
- Maximum height of snowbanks:

Slush	Wet snow	Dry snow
20 mm	50 mm	130 mm

### 15.2. Airside

Minimum closing criteria on the movement area:

- Clearance between snow and engine/propeller shall be at least 30 cm.
- The clearance between snow and the underside of the wing shall be at least 50 cm.
- When markings, signs, or other compensatory measures such as centre lights, guiding lights, edge lights are not visible or follow-me is not available.
- The distance to the snow dump on TWY and APRON must be in accordance with aircraft code letter.

Aircraft Code Letter	A	B	C	D	E	F
Distance from TWY centre line	15,5 m	20 m	26 m	37 m	43,5 m	51 m
Distance from centre line on APRON	12	16,5	22,5	33,5	40	47,5
Distance to aircraft on stand	3 m	3 m	4,5 m	7,5 m	7,5 m	7,5 m

## 16. Chemical and sand used on airside.

The airport operates according to EASA 139/2014 ADR.OPS.B.036 (b)(1)(i)

The airport has permission to use materials for movement area treatment, ref AIP ENGM AD 2.7:

KFOR – Potassium formate fluid (abbreviation used in RWYCC)

SAND - The sand used is dry sand from a silo and shall have an aggregate size that must be able to pass a 4 mm square sieve.

Capacity

De-icing Chemicals Liquid	160 m <sup>3</sup>	AVIFORM L50
De-icing Chemicals Granulas	57 tons	AVIFORM
Sand	675 tons	

### 16.1. Chemical

OSL use AVIFORM L50, a liquid de-icing agent based on 50 % potassium formate on RWYs and TWYs.

The AVIFORM L50 satisfies all requirements of airports on environmental properties, technical standards, efficiency, performance, and product compatibility of liquid de-icing agents and is approved according to SAE AMS 1435D.

### 16.2. Sand

The amount laid out should normally be approx. 20 - 40 g/m<sup>2</sup>.

Sand is primarily used on taxiways and around the terminals.

In situations where there may be or is experienced slippery conditions on runway exits, sand can be used to improve friction.

Sand can cause wear on fan blades and there is a high focus on remove, as much as possible, to reduce such wear.

## 17. Reporting/NOTAM/SNOWTAM

Measures for winter field maintenance consist of:

- Highly trained GRF INSPECTORs with experience from operational winter conditions.
- Inspection of the movement area including measurement of snowfall depth and providing updated RWYCC, on the runway system
- Reporting of conditions in the movement area
- Improvement measures of such a scope that the priorities defined in international, national, and local regulation is achieved.

Winter field maintenance at OSL is conducted in a way and to such an extent that airport operations can continue without jeopardising aviation safety and if possible, without interfering with air traffic capacity.

Publication of SNOWTAM follows the general rules of Avinor described in AIP Norway AD 1.2, point 2.7. In addition, the RWYCC is automatic sent to and updated on ATIS.

When measurements and assessment of the runway status have been performed, pilots will be informed via radio from ATC, until ATIS is updated with RWYCC and contamination.

In a weather situation where improvement work or measurement of runway status cannot be conducted at the same time as air traffic, the Operations Maintenance Manager or someone appointed by that person shall decide, in consultation with the airport's air traffic management unit, to close part or all the movement area. In such a case, the length of the closure shall be determined and announced via NOTAM.

At the airport, up-to-date information about the quality of field maintenance and about winter field maintenance shall also be made available at the airport's APOC.

## 18. Autonomous snow clearing

For optimized and efficient snow clearing of taxiways and runways, OSL will during winter 2023/24, conduct testing of PSB vehicles that can be controlled both manually and autonomously.

During the test period, such vehicles will have a safety driver on board who can monitor and take care of the operation, so that the requirements for the airport's winter operation are not exceeded. In manual operation, each individual PSB, in a snow clearing group, is driven by an operator, monitored by the GRF INSPECTOR

When full autonomy is approved and accepted by the authority, the snow clearing group will be operated and monitored by an operator located in the front vehicle. The remaining vehicles will be unmanned and electronically connected to the front vehicle through an autonomous control platform.

The only difference, between autonomous and manual operation, will be a constant green light on the vehicle's cab when autonomous operation is used.



The following text is provided in AIP Norway, ENGM AD 2.20 regarding Autonomous snow clearing:

- a. For optimized and efficient snow clearing of taxiways and runways, Oslo Airport uses vehicles of the sweeper-/blower type controlled both manually and autonomously.
- b. When clearing snow from taxiways and runways, standardized patterns are used for vehicles operating in snow clearing groups.
- c. During manual operation, each individual vehicle, in a snow clearing group (sweeper-/blower), is driven by an operator, supervised by team leader snow clearing.
- d. When autonomy is used, the snow clearing group will be operated and monitored by an operator located in the front vehicle. The remaining vehicles will be unmanned and electronically connected to the front vehicle through an autonomous steering platform.
- e. Autonomous vehicles will, if required, be driven manually by an operator in accordance with the standardized patterns.
- f. The only difference, between autonomous and manual operation, will be a steady green light on the vehicles cab when autonomous operation is used.

g. All vehicles in an autonomous snow clearing group can be stopped immediately by the operator. If necessary, for safety reasons, the snow clearing group can be stopped by the relevant air traffic controller or the responsible team leader snow clearing.

## 19. Glossary and definitions used in this document.

AIP - Aeronautical Information Publication (eAIP- electronic AIP)

AMS - Airfield Maintenance Supervisor (used in this document)

AOM - Airport Operations Manager

APOC - Airport Operations Centre

APP - Approach

AR – Airport Regulations

ARR – Arrival

ATC - Air Traffic Control

ATIS - Automatic terminal information service

DEP – Departure

ENGM – ICAO location indicator for Oslo Airport

GA – General Aviation

GRF – Global Reporting Format

IATA - International Air Transport Association

ICAO – International Civil Aviation Organization

NOLAC - Intermediate holding position on TWY Victor

OSL – IATA designator for Oslo Airport, Gardermoen

PSB – Plough, sweep, blow (used in this document to indicate the capability on snow clearing machines)

RVR – Runway Visual Range

RWYCC – Runway Condition Code

RWY – Runway

SAE AMS - Society for Automotive Engineering Aerospace Material Specifications

SCG – Snow Clearing Group (used in this document)

SOMBI – Intermediate holding position on TWY Papa.

GRF INSPECTOR – Name on the Team Leader Snow Clearing (used in this document)

TWR – Tower (at OSL, the ATC Control Tower)

TWY - Taxiway

UHF – Ultra high frequency (300 to 3000 MHZ)

**SNOWPLAN**

«The aerodrome operator shall, when the aerodrome is expected to operate in conditions when snow, slush or ice may accumulate on the movement area, develop and implement a snow plan.»

*Source: EASA 139/2014 SUBPART B — AERODROME OPERATIONAL SERVICES, EQUIPMENT AND INSTALLATIONS (ADR.OPS.B.035)*

**SNOWTAM**

“A special series NOTAM given in a standard format providing a surface condition report notifying the presence or cessation of hazardous conditions due to snow, ice, slush, frost, standing water or water associated with snow, slush, ice or frost on the movement area.” *Source: ICAO Annex 15*